

## Food & Marketing



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## Food Price Outlook for 1999: An Update

The Consumer Price Index (CPI) for all food is expected to increase 2 to 3 percent in 1999, following a 2.2-percent increase in 1998. Food at home is projected to rise 2 to 2.5 percent, while food away from home should increase 2.5 to 3 percent. The 1998 all-food increase was the smallest since 1993 and follows the USDA baseline projection of an average growth rate of 2.3 percent from 1998 to 2008.

Although 1999 looks like another year of low food price inflation, uncertainties remain that will influence whether the increase for all food is closer to 2 or to 3 percent. Will the sluggish export market for beef and higher valued cuts of pork and poultry continue throughout 1999? Can the expected 2-percent increase in milk production meet consumer demands for butterfat products in 1999? And will higher expected retail prices for oranges and bananas continue longer than the first 6 months of 1999?

The food categories involved in these uncertainties—beef, pork, and poultry; dairy and related products; fats and oils (including butter); and fresh fruits—together account for 39 percent of the food-at-home CPI. Thus the answers to

these questions will be determining factors in the final figure for 1999.

Retail food price changes are underpinned by general economic factors that influence both food prices and the relationship between farm and marketing costs. Increasing economies of size in the farm sector continue to reduce the cost of producing food at the farm level. At the same time, the farm value share of the retail cost of food continues to decline as consumers pay for additional processing and services to reduce the time required for food preparation. The share of the consumer food dollar going to purchase food away from home has increased steadily, averaging 45 percent for the past 2 years, while the farm-value share of the retail price for food items is expected to average only 23-24 cents on the dollar for 1998 and 1999.

As post-farm gate processing and services take up an increasing proportion of the food dollar, the retail price of food increasingly reflects the general inflation rate in the wider economy. In recent years, food price increases have been small, in line with the low general inflation rate, which was only 1.9 percent in 1998 and is forecast to be around 2-3 percent in 1999.

Food price changes are a key variable in determining what proportion of income consumers spend for food and what is left for purchases of other goods and services. In 1997, 10.7 percent of household disposable personal income went to pay for food, with 6.6 percent for food at home and 4.1 percent for food away from home, down from 10.8 percent in 1996. The downward trend in the proportion of household disposable personal income used for food should continue into 1998 and 1999. Preliminary figures (inflation-adjusted) on food sales for 1998 show food-at-home spending went down 0.1 percent, and spending on food away from home went down 1.5 percent, while per capita disposable income rose 3.1 percent. With continued competition among grocery stores, restaurants, and fast-food establishments, the same pattern is expected through 1999.

The food-at-home CPI increase of 2.2 percent in 1998 was kept moderate by lower grain prices and adequate feed supplies, large supplies of competing meats, adequate supplies of coffee, increased sugar production, and strong competition in the soft drink and prepared food industries. The 1998 CPI increase of 2.6 percent for food away from home was smaller than in 1997. Continued strong competition among restaurants and fast-food establishments kept pressure on prices, while lower costs for raw materials, especially food, kept costs down.

Overall food price increases in 1998 were influenced largely by three circumstances. Large consumer demand coupled with stagnant milk production contributed to higher retail prices for dairy products, especially high butterfat items. Reduced fresh fruit and vegetable supplies resulting from damages inflicted by El Niño weather patterns and Hurricane Mitch led to substantial retail price increases for those foods. And modest increases in the indexes for sugar and sweets, cereals and bakery products, and other foods were the result of adequate supplies and a small increase in the general price level, which contributes to manufacturing, processing, and marketing costs.

Overall food price decreases in 1998 may be accounted for by large, competing supplies of meats that led to retail

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price decreases for beef and pork; lower feed prices that led to larger egg production and a consequent drop in retail prices; and adequate coffee supplies and competition among soft drink producers for market share that lowered the prices for these items in the nonalcoholic beverages index.

**Beef and veal.** After falling 0.2 percent in 1998, the CPI for beef and veal is expected to increase 1-2 percent in 1999. Commercial beef production is expected to decline 2-3 percent in 1999, with further reductions expected in 2000. However, continued record-large supplies of competing meats at prices lower than beef prices will limit large retail price increases. As supplies decline, retail beef prices will begin rising modestly in spring 1999.

Economic slowdowns in Asia and Russia resulted in a declining U.S. beef trade balance in 1998, with less of the top-graded U.S. beef going into the export market. The strong U.S. economy led to an almost 11-percent rise in beef imports in 1998, while exports grew less than 1 percent. Trade is expected to be more balanced in 1999. World beef supplies are expected to decline and slow U.S. imports to 3-4 percent, while U.S. beef exports are expected to rise 7-9 percent, largely as a result of food aid programs to Russia.

**Pork.** With expectations of plentiful supplies of pork and competing meats throughout 1999, pork retail prices are expected to fall another 3-4 percent, after sliding 4.7 percent in 1998. Pork production increased 10 percent in 1998, leading to the largest per capita consumption rate increase since 1994, with an increase of almost 8 pounds from 1997 per capita consumption of 48.7 pounds. With fractionally lower production and expected export increases of 10 percent, U.S. per capita pork consumption in 1999 will decline slightly from 1998 levels. U.S. pork exports in 1999 are expected to be over 1.3 billion pounds, up from more than 1.2 billion in 1998.

When hog prices were historically low in late 1998, concerns were raised about why retail prices did not drop as sharply as producer prices (AO March 1999). Different demand situations can explain why

### Changes in Food Price Indicators 1997 through 1999

	Relative weights <sup>1</sup>	1997	1998	Forecast 1999
	—Percent—	—Percent change—		
All items		2.3	1.6	2
All food	100.0	2.6	2.2	2 to 3
Food away from home	37.1	2.8	2.6	2.5 to 3
Food at home	62.9	2.5	1.9	2 to 2.5
Meats	10.9	3.0	-1.9	-1 to 1
Beef and veal	4.8	1.7	-0.2	1 to 2
Pork	3.8	5.2	-4.7	-4 to -3
Other meats	2.2	2.8	0.9	0 to 1
Poultry	3.2	2.8	0.3	-1 to 1
Fish and seafood	2.2	2.3	2.6	2 to 3
Eggs	0.8	-1.5	-3.3	-3 to -1
Dairy products	6.8	2.4	3.6	4 to 5
Fats and oils	1.9	0.9	3.7	3 to 4
Fruits and vegetables	9.1	2.0	5.7	2 to 3
Fresh fruits and vegetables	7.0	1.7	7.3	3 to 4
Fresh fruits	3.6	0.8	4.3	7 to 8
Fresh vegetables	3.4	2.9	10.9	-3 to -1
Processed fruits and vegetables	2.1	2.4	1.7	2 to 4
Sugar and sweets	2.5	2.9	1.6	1 to 3
Cereals and bakery products	10.0	2.1	2.0	2 to 4
Nonalcoholic beverages	7.0	3.7	-0.3	2 to 3
Other foods	8.5	3.2	2.7	2 to 3

<sup>1</sup>Bureau of Labor Statistics estimated weights as share of all food, December 1997.

Sources: Historical data, Bureau of Labor Statistics; forecasts, Economic Research Service.

Economic Research Service, USDA

retail pork prices do not parallel hog prices.

First, contractual agreements between hog producers and slaughter plants are increasingly the norm, with only about 10 percent of slaughter hogs sold in the open spot, or cash, markets. When the available slaughter hog supply exceeds plant capacity (as it did in fourth-quarter 1998), slaughter plants lower their bid for the available supply of noncontracted hogs, which sharply reduces spot market prices. Conversely, when slaughter facilities are at relatively low rates of utilization (as in third-quarter 1997), packers bid spot market hog prices up sharply.

Second, pork retail prices are generally slow to react to farm price changes and do not fluctuate as much as producer or wholesale prices. Historically, declines in the farm value of pork take more than a year to be passed on to consumers, while increases take about 4 months. Retail values do not *rise* at the same rate nor to the same degree as farm values. For example, the net farm value for pork increased 24

percent in 1990, but the pork CPI increased by only 14.7 percent in 1990 and 3.3 percent in 1991. Similarly, retail prices tend to *fall* less than farm values. In 1991, the net farm value for pork fell 10 percent, followed by an additional decrease of 14 percent in 1992, but the pork CPI rose 3.3 percent in 1991 and declined by only 4.7 percent in 1992. More recently, in 1996, when the net farm value for pork increased 27 percent, the pork CPI index increase was only 9.9 percent in 1996 and 5.2 percent in 1997.

Retailers strive to offer a variety of meat and poultry products to consumers, knowing that increased sales in one meat species comes at the expense of another. During the December holidays, retailers found they were able to move pork without significant retail price reductions, as pork supplies met rising retail consumer demand at the price range set by retailers.

**Other meats.** Other meats are highly processed food items (hot dogs, bologna, sausages). The CPI for this category increased 0.9 percent in 1998, and 1999

prices are expected to increase up to 1 percent. Price changes for items in this category are influenced both by the cost of meat inputs and by the general inflation rate, since they reflect additional manufacturing costs.

**Poultry.** Broiler meat production for 1999 could increase to 29.4 million pounds, about 5 percent above 1998. However, 1999 turkey production is forecast at 5.25 million pounds, fractionally below 1998. Turkey producers are recovering from 2 years of negative returns, which has held down production increases.

Export prospects for U.S. poultry have become less certain due to the continuing financial crisis in many Asian countries and loss of the Russian market. Broiler meat exports are forecast to remain weak through much of 1999, with first-half exports expected to be 20-25 percent lower than 1998. As these circumstances continue into 1999, increases in production likely will lead to lower retail prices for much of the year, despite reduced supplies of competing red meat. The poultry CPI is expected to change only slightly again in 1999, between -1 and 1 percent, following an increase of 0.3 percent in 1998.

**Fish and seafood.** The CPI for fish and seafood was up 2.6 percent in 1998, with an expected increase of 2-3 percent in 1999. More than 50 percent of the fish and seafood consumed in the U.S. in 1998 came from imports. Imports for 1998 were up, especially for salmon, shrimp, tilapia, mussels, clams, and oysters. The strength of the U.S. dollar favors a continued rise in imports, especially from Asian countries.

U.S. farm-raised production supplied 20-25 percent of U.S. fish and seafood consumption in 1998. The U.S. has one of the world's largest year-round farm-raised fishing industries. Domestic production of catfish reached record highs in 1998, about 560 million pounds, and catfish growers are expected to continue expanding in 1999. U.S. per capita seafood consumption has remained flat in the 1990's—between 14.8 and 15.2 pounds of edible meat per year. Increases in total domestic seafood consumption have come from population growth. However, a

strong U.S. economy is expected to boost away-from-home food demand, which is especially important for seafood, as a large percentage of seafood is consumed at restaurants.

**Eggs.** After a period of volatile egg prices in 1996, the CPI for eggs fell 1.5 percent in 1997 and 3.3 percent in 1998, and is expected to fall 1-3 percent in 1999. With table-egg production expected to be about 2 percent higher in 1999, consumption is expected to increase to the highest level since 1988. Higher production levels and slower growth in exports led to lower retail prices in 1997 and 1998, and is expected to do the same in 1999.

**Dairy products.** Robust demand and stagnant milk production produced record high retail prices for milk and most dairy products throughout most of 1998. Increased demand and lower feed costs have provided a strong incentive to boost milk production in 1999, leading to expected increased production of 2 percent. As a result of a lag in retail price adjustments to production increases, the milk CPI is forecast up 4-5 percent in 1999, following a 3.6-percent increase in 1998. Strong consumer demand for dairy items, especially gourmet ice cream, cheese, and butterfat products, is expected to continue into 1999.

**Fats and oils.** The fats and oils CPI increased 3.7 percent in 1998 and is expected to rise another 3-4 percent in 1999. The large increases, following a modest 0.9 percent increase in 1997, are largely an artifact of the 1998 move of butter from the dairy products index to the fats and oils index by the Bureau of Labor Statistics, since higher retail prices for butter, which now accounts for 31 percent of the fats and oils index, led the increase. The remaining items contained in the fats and oils index are highly processed food items, and their price changes are influenced by the general inflation rate, as well as by U.S. and world supplies of vegetable oils.

**Fresh fruits.** Reduced production of most summer stone fruits and fall pears in 1998 helped to boost retail fresh fruit prices for the year. However, the 1998 U.S. apple crop, which was up 9 percent from a year ago, helped mitigate retail price increases

for other fruits. In 1998, U.S. production of grapes, pears, peaches, apricots, sweet cherries, strawberries (in the 6 highest producing states), and blueberries all declined. Production of tart cherries and cranberries was up slightly.

The 1997/98 U.S. citrus crop increased 5 percent over the previous year, mostly because of a record orange crop, up 9 percent over the previous year. Wet, cool conditions in California and spring drought conditions in Florida reduced U.S. orange production forecasts for 1998/99 to 21 percent below 1997/98 production, and a freeze in California's San Joaquin Valley in December 1998 caused USDA to lower 1998/99 orange production forecasts even more, bringing the level to 27 percent less than the previous year's 13.9 million tons. California's production estimate alone was down 49 percent.

Because California produces about 80 percent of U.S. fresh-market oranges, retail prices for oranges are expected to increase 40-50 percent for the first 6 months of 1999. Imports from other countries, along with diversion of part of Florida's orange production (usually used for juice) to the fresh market, should mitigate the effects.

Most of the tropical fruit supplies in the U.S., including the most popular varieties—bananas, mangoes, pineapples, and papayas—are imported. After seasonally lower banana prices in 1998, higher retail prices are forecast for most of 1999. Hurricane Mitch, which hit the banana-growing areas of Honduras and Guatemala in November 1998, caused major damage to the crop. The impact of storm damage in Central America on retail prices should occur as early as February or March 1999, with prices peaking in April. Retail banana prices are forecast to increase up to 15 percent in the first 6 months of 1999, and an additional 8 percent during the last half of the year.

Fresh oranges and bananas account for 20 and 18.5 percent of the fresh fruits CPI. Higher prices for these two products raise the expected CPI for 1999 beyond the increased level that would be expected simply from steady U.S. consumer demand for fresh fruits. Following a 4.3-percent increase in 1998, the fresh

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### Minimum Wage Increases— The Impact on Food Prices

Ongoing debate about the merits of increasing the minimum wage has generated empirical research on the potential effects of an increased minimum wage on employment, but little work has been done on the impact of minimum wage increases on prices in general or on food prices in particular. Because the food industry has larger-than-average concentrations of workers in low-wage occupations, increases in the minimum wage might be expected to have fairly large impacts on food prices. USDA's Economic Research Service (ERS) recently conducted research to estimate what the price effects of a minimum wage increase in the food industry might be, taking into account the size of the increase, effects on benefits in addition to wages, and effects on pay in other low-wage categories.

ERS estimates derive from an economic model (Leontief Input/Output model) that assumes all increased wage costs can be passed through to the consumer. Firms are not always able to pass through wage increases this way—purchasers may be able to substitute other products if firms increase prices too much, for example. But by assuming full pass-through, the model results can be considered as upper bounds.

The model takes into account the industry employment structure, share of workers in the minimum wage bracket, share of wages and salaries in the total cost of production, and the percentage increase in the minimum wage. A change in one input component—the minimum wage in this case—trickles through the system, affecting costs and, in turn, prices. ERS researchers estimate new food prices under several likely scenarios that vary the base of the minimum wage increase (50-cent increase over the 1992 minimum of \$4.25 or 50-cent increase over the 1997 minimum of \$5.15), spillover effects (increases of 1-3 percent in near-minimum-wage categories to maintain graduated wage scales), and the effect on total compensation (wages and other benefits).

ERS estimates these price effects separately for the two industry categories defined by the U.S. Bureau of Labor Statistics (BLS) that would generally be considered the food and restaurant sectors. The *food and kindred products industry* category includes establishments that manufacture or process food and beverages for human consumption. The *eating and drinking places industry* category includes retail establishments selling prepared food and drink for consumption on the premises, including fast-food restaurants. Results indicate a smaller effect in the food and kindred products industry, with consumer price increases ranging from 0.3 to 0.5 percent, than in the eating and drinking places industry, which shows consumer price increases of 0.9 to 1.3 percent. But for both categories, the effects are small in absolute terms.

What accounts for these small increases? The proportion of total cost of production affected by any wage increase in the food industry would be relatively small; labor's share of the cost of production was only 13.5 percent for the food and kindred products industry and 34 percent for the eating and drinking establishments. Moreover, the share of food industry workers in the minimum wage category is also small—less than 10 percent in most subsectors of the food and kindred products industry and around 23 percent in the eating and drinking places industry. So the proportion of labor costs affected by a minimum wage increase—even including spillover effects on other low-wage workers—is relatively small. Finally, the wage and salary share of labor costs, the portion affected directly by a minimum wage increase, is only part of total labor costs—75-80 percent in most cases—further limiting the price effects of even full pass-through of increased wage costs.

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fruits CPI is expected to increase 7-8 percent in 1999.

**Fresh vegetables.** El Niño-driven cold, wet weather in Florida, California, and Mexico reduced fresh-market vegetable supplies and disrupted planting and harvest windows, resulting in increased retail prices throughout the first half of 1998. In addition, although downgraded to a tropical storm by the time it reached the U.S., Mitch caused wind and water damage to some central Florida vegetables in early November, putting additional upward pressure on prices. As a result, the fresh vegetable CPI rose 10.9 percent in 1998.

Two percent fewer acres of fresh-market vegetables and melons were harvested in fall 1998. Acreage of cool-season crops—lettuce, carrots, and broccoli—declined 1 percent, while that of warm-season crops—tomatoes, bell peppers, snap beans—dropped 3 percent. Mitch damaged several of the fall-season vegetable crops in Florida and flooded cantaloupe fields in Costa Rica and Honduras, reducing supplies and causing higher consumer prices into early 1999. Strong winds caused some bloom loss for tomatoes and peppers; snap beans and radishes were drowned, requiring replanting of some fields; yield potential for Florida's fall vegetables was diminished; and product quality of vegetables like tomatoes and eggplant that did survive was reduced.

During the 1999 winter season (January-March), harvested acreage of 13 selected vegetables is forecast to rise 3 percent to 193,500 acres, and imports from Mexico will add to large domestic supplies. For calendar year 1999, fresh-market vegetable acreage is expected to increase about 1 percent. Potato production, which increased 2 percent in 1998, is expected to increase another 1 percent in 1999. As a result, the fresh vegetable CPI is forecast to fall 1-3 percent in 1999, if weather and growing conditions in the major fresh vegetable growing areas return to normal.

**Processed fruits and vegetables.** Production of the four leading vegetables for processing (tomatoes, sweet corn, snap beans, and green peas) was down 2 percent in 1998, after a 3-percent decline in planted acreage a year earlier. Per-acre yields were below a year earlier for

tomatoes, green peas, and sweet corn (down 7, 3, and 2 percent), but were higher for snap beans (up 3 percent). Wholesale prices of canned vegetables and juices for 1998, however, averaged only 1 percent above the previous year, placing little pressure on retail prices. The ready availability of canned and frozen vegetables, frozen concentrate orange juice, and other fruit supplies kept the CPI increase for processed fruits and vegetables to 1.7 percent in 1998, but the reduced acreage and lower yields are expected to lead to an increase of 2-4 percent in 1999.

**Sugar and sweets.** Domestic sugar production was up to 8 million tons in 1997/98 and is projected up another 3 percent in 1998/99 to 8.3 million tons. Higher sugarbeet prices and lower prices for competing crops led to acreage increases in both years. Along with higher sugar output, lower retail prices for selected sugar-related food items in 1998 kept the increase in the sugar and sweets CPI to only 1.6 percent. It is projected to continue to increase 1-3 percent in 1999.

**Cereal and bakery products.** These products account for a large portion—almost 16 percent—of the at-home food CPI. Lower grain prices in 1997 and 1998 held the increase to 2 percent in 1998. Most of the costs to produce cereal and bread products—more than 90 percent in most cases—are for processing and marketing, leaving the farm ingredients as a minor cost consideration. Competition for market share among the three leading breakfast cereal manufacturers led to the cereal component of this index falling 9.7

percent from 1995 to 1996, and 1.4 percent from 1996 to 1997. In 1998, cereal prices were up slightly—1.3 percent. Continued strong demand for cereal and bakery products, balanced by continued competition among producers, should keep the CPI increase for cereals and bakery products to about 2-3 percent in 1999.

**Nonalcoholic beverages.** Coffee and carbonated beverages are the two major components of this category, accounting for 15 and 38 percent of the nonalcoholic beverages CPI. After increasing 3.7 percent in 1997, due primarily to higher coffee prices, the index fell 0.3 percent in 1998. Lower coffee prices and strong competition in the soft drink industry between the two largest firms continued throughout most of 1998. After increasing almost 13 percent in 1997, coffee prices fell almost 3 percent in 1998; carbonated beverages were down 1.4 percent in 1997 and 1 percent in 1998.

Brazil's 1998/99 coffee harvest reached a near-record 36 million bags, a third of the world's total and 50 percent above the 1997/98 marketing year. The current large Brazilian crop is forcing other countries to cut prices, which should continue to lower prices in the U.S. (*AO* March 1999). Brazil is the largest producer of arabica coffee beans, which are preferred for gourmet coffee blends. U.S. imports of coffee are up to 80 percent arabica beans.

Brazil's recent near-record production should lead to larger U.S. stocks and continued lower consumer prices. The continued decline of coffee prices, combined

with continued competition in the soft drink industry, should keep the CPI for nonalcoholic beverages to a moderate 2-3 percent increase.

**Other prepared foods.** Other miscellaneous prepared foods—including frozen dinners, pizzas, and precooked frozen meats—are highly processed and largely track changes in the all-items CPI. Competition among these products and from the away-from-home market should continue to dampen retail price increases for items in this category. In 1998, the CPI for other prepared foods increased 2.7 percent, and the 1999 increase is expected to be in the same range at 2-3 percent. **AO**

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#### Upcoming Reports—USDA's Economic Research Service

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#### April

- 9 *World Agricultural Supply and Demand Estimates (8:30 am)*
- 12 *Cotton and Wool Outlook (4 pm)\*\**  
*Oil Crops Outlook (4 pm)\*\**  
*Rice Outlook (4 .pm)\*\**
- 13 *Wheat Outlook (9 am)\*\**
- 20 *Agricultural Outlook\**
- 21 *Tobacco\**
- 22 *Vegetables and Specialties\**
- 23 *Feed Yearbook\**
- 23 *U.S. Agricultural Trade Update (3 pm)*
- 27 *Livestock, Dairy, and Poultry (3 pm)\*\**

\*Release of summary, 3 pm

\*\*Available electronically only

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